

REMARKS

Claims 1-16, as amended, remain herein.

Applicants appreciate the indication in the Office Action that claims 15 and 16 contain allowable subject matter. This Amendment is believed to place this application fully in condition for allowance, and surely in better condition for any appeal. Thus, entry of this Amendment and allowance of all claims 1-16 are respectfully requested.

1. Claims 10-12 have been amended to moot the objections thereto.

2. Claims 1, 2, 6, 8, 11 and 13 were rejected under 35 U.S.C. § 103(a) over Hsiung et al. U.S. Patent 6,876,313 and Levine et al. U.S. Patent 5,697,689. Hsiung discloses a lighted knob which transmits light from a light source at the rear of the knob forward to the front of the knob. Hsiung fails to disclose a light guiding piece located in a concave portion, as recited in applicants' claim 1. While the light-guiding piece in Hsiung is part of the knob, the light guiding piece in applicants' claim 1 is located in the concave, not the knob.

Hsiung further fails to disclose a light guiding piece that transmits light from a light emission source to illuminate an outer periphery of the rear surface of the operation knob, as recited in applicants' claim 1. The light guiding piece of Hsiung illuminates the front surface of the knob, not the rear surface.

The Office Action admits that Hsiung fails to disclose first and second reflection surfaces that reflect light outward from the light receiving surface.

Levine fails to disclose what Hsiung lacks. Levine discloses a light guide with reflective surface that directs light to from within the guide to a front surface of the light guide. But Levine fails to disclose either a light guiding piece located in a concave portion or a light guiding piece that transmits light from a light emission source to illuminate an outer periphery of the rear surface of the operation knob, as recited in applicants' claim 1. Rather, the light guiding piece of Levine illuminates the front surface of the light guide.

Thus, neither Hsiung nor Levine, alone or combined, discloses every element of applicants' claim 1. Further, it would not be obvious to one of ordinary skill in the art to combine Hsiung and Levine to render applicants' claim 1 obvious. The reflectors of Levine would serve no purpose in Hsiung, because the light guide in Hsiung directs light from a light source at the back of the knob directly to the front of the knob. There is no need to direct the light in any other direction. And there is no disclosure in either Hsiung or Levine that would motivate one of ordinary skill in the art to combine Hsiung and Levine to render applicants' claim 1 obvious. For these reasons, Hsiung and Levine are inadequate grounds for rejection of claims 1, 2, 6, 8, 11 and 13 under 35 U.S.C. § 103(a).

Regarding claim 2, neither Hsiung nor Levine discloses a transparent knob shaft or bearing section. The Office Action cites the Hsiung specification at col. 2, lines 26-27 to support its assertion that Hsiung discloses such a knob shaft or bearing section. However, the knob shaft and bearing section in applicants' invention correspond to Hsiung's shaft 211 and coupling sleeve 241, respectively, neither of which is transparent. And Levine makes no mention of any

transparent knob shaft or bearing section. Thus, Hsiung and Levine, even combined, fail to disclose every element of applicants' claim 2, and Hsiung and Levine are inadequate grounds for rejection of claim 2 under 35 U.S.C. § 102(a).

Regarding claim 8, one of ordinary skill in the art would not think to combine a reflective surface, such as that disclosed in Levine, with the rear surface of the light guiding piece of Hsiung, because such a reflective surface would render the light guide in Hsiung useless. The light guide of Hsiung directs light directly from a light source at a rear of the knob to the front of the knob. A reflective surface on the rear of the light guide, as required in applicants' claim 8, would prevent light from entering the light guide, making the light guide useless. Thus, a person of ordinary skill in the art would not think to combine Hsiung and Levine to render obvious applicants' claim 8.

For all the foregoing reasons, Hsiung and Levine are inadequate grounds for rejection of claims 1, 2, 6, 8, 11 and 13 under 35 U.S.C. § 103(a). Reconsideration and withdrawal of the rejection are respectfully requested.

3. Claims 3-5, 7, 9, 10, 12 and 14 were rejected under 35 U.S.C. § 103(a) over Hsiung, Levine, Bauer U.S. Patent 4,800,466, and Weber U.S. Patent 6,092,902.

Regarding claim 3, Hsiung and Bauer fail to disclose a knob wherein both a shaft section of an operation part and a bearing section of the operation knob are made of a transparent material. Bauer discloses a knob shaft made of transparent material, but it would not be obvious to one of ordinary skill in the art to combine Hsiung, Bauer, and Weber. The light guides of Hsiung direct light from the rear outer edge of the knob to the front outer edge of the knob. A

plastic cap covers the middle of the knob. Making the shaft and bearing of a transparent material would serve no purpose in Hsiung. In fact, Hsiung teaches away from such a combination since if the transparent pieces were connected to the light guide, it would diffuse light from the light guide around the edges of the knob. And the light source in Bauer, although anchored in the knob, extends into the light guides. The light guides then extend around to various light-emitting surfaces on a panel. Thus, a transparent bearing or shaft would be useless in Bauer. In fact, Bauer teaches away from such a use, because a transparent shaft or bearing would diffuse light from the light guides. Thus, neither Hsiung nor Bauer contains any teaching that would motivate one of ordinary skill in the art to combine Hsiung and Bauer with Weber to render obvious applicants' claim 3.

Further, none of the cited references discloses a light guiding piece located between the operation knob and the panel, as recited in applicants' claim 3. Rather, Hsiung and Weber disclose light guides that are part of the knob and Levine and Bauer disclose light guides located behind the operation panels. Nor do any of the cited references contain any disclosure that would motivate one of ordinary skill in the art to position a light guide between the panel and the knob.

Further, none of the cited references discloses light guides that diffusively transmit light from the light emission source to illuminate the outer periphery of the rear surface of the operation knob, as recited in applicants' claim 3. Rather, Hsiung and Weber disclose light guides that illuminate a front surface of the knob, and Levine and Bauer disclose light guides that illuminate surfaces of their respective operation panels. See, for example, Hsiung, col. 2, lines 26-26; Weber, col. 4, lines 10-16; Levine, col. 5, lines 19-23, and Bauer, col. 3, lines 52-55. Nor

do any of the cited references contain any disclosure that would motivate one of ordinary skill in the art to use a light guide that would illuminate the outer periphery of the rear surface of the operation knob.

Regarding claim 7, none of the cited references discloses a light receiving surface of the light guiding piece for receiving the light from the light emission surface that faces an interior of the operation knob. Hsiung discloses a light guiding piece that runs parallel to the interior of the operation knob along its outer periphery. The receiving surface thus faces away from the interior surface of the knob on the rear surface of the knob. See Hsiung, Fig. 2. Levine and Bauer disclose receiving surfaces that are completely separate from their respective knobs. The receiving surfaces in Levine face each other, with a light source between them. They are perpendicular to the inside surface of the knob. See Levine, Figs. 2B, 10. Bauer also discloses entrances to light guides that face each other and are perpendicular to an internal surface of the knob. See Bauer, Fig. 3. Finally, the light receiving surface of Weber faces away from the inside surface of the knob, so that light enters the knob. See Weber, Fig. 1; compare applicants' Figs. 7, 9. Nor do any of the cited references contain any disclosure that would motivate one of ordinary skill in the art to position a light guide such that its light receiving surface would face an inside surface of the operation knob.

Regarding claim 10, the Office Action states that Hsiung discloses a light guiding piece in the concave of the panel. However, the light guiding piece of Hsiung is entirely within the knob, which is a separate element from the concave of the panel. Thus, Hsiung fails to disclose a light guiding piece in the concave, as recited in applicants' claim 10.

For all of the foregoing reasons, it would not be obvious to one of ordinary skill in the art to combine Hsiung, Levine, Bauer, and Weber to render obvious applicants' claims 3-5, 7, 9, 10, 12 and 14. Reconsideration and withdrawal of the rejection are respectfully requested.

For all of the foregoing reasons, all claims 1-16 are now fully in condition for allowance, which is respectfully requested. The PTO is hereby authorized to charge or credit any necessary fees to Deposit Account No. 19-4293. Should the Examiner deem that any further amendments would be desirable in placing this application in even better condition for issue, he is invited to telephone applicant's undersigned representative.

Respectfully submitted,

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